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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/570,038	02/27/2006	Yuji Okamoto	64985(49381)	1093
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EXAMINER				
LEWIS, LISA C				
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/570,038

**Applicant(s)**

OKAMOTO ET AL.

**Examiner**

Lisa Lewis

**Art Unit**

2436

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 27 February 2006.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 6-17 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 6-17 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 27 February 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☒ Information Disclosure Statement(s) (PTO/GS-08)  
Paper No(s)/Mail Date see attached  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_  
5) ☐ Notice of Informal Patent Application  
6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

Applicant's preliminary amendment filed 02/27/2006 has been received and entered. Applicant has cancelled claims 1-5 and added claims 6-17. Claims 6-17 are presented for examination on the merits.

#### ***Claim Rejections - 35 USC § 112***

Claims 6-17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The examiner notes to the applicant:

The rejection can be overcome by executing one of the following options:

- 1) Pointing out to the examiner, the structure and algorithm for invoking the means plus function rule from the specification.
- 2) Strike the means plus function claim language from the claim.
- 3) Cancel the claim.

Further, claims 6-17 recite the limitation "meansunit". This term is not known in the art, and it is unclear whether this is simply a unit, or some other structural element. Appropriate clarification is requested.

Further, claims 10 and 12-17 recite the limitation "the concealing method is setting of authentication information encrypting to the image data." This limitation is unclear. It will be interpreted as "the concealing method is setting of authentication information corresponding to encryption of the image data." Appropriate clarification is requested.

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. **Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mutsuaki (JP 2000-244753) in view of Yoshiki (JP 11-275326).**

3. Regarding claim 6, Mutsuaki teaches an image processing apparatus including a storing unit for storing image data and performing an output process based on the image data stored in the storing unit (An image memory of a facsimile equipment is used to store image data and an image output part for outputting stored image data stored in the image memory - see abstract, for example), comprising a controller including:

- a. Means for designating the image data stored in the storing unit and accepting an instruction for concealment of the designated image data (A data specifying part is used for specifying image data in the image memory and a cipher image encoding part is used for encoding (i.e., concealing) the specified data) - see abstract, for example.
- b. Means for concealing the designated image data based on the accepted instruction (A cipher image encoding part is used for encoding (i.e., concealing) the specified data) - see abstract, for example.

4. Mutsuaki does not teach a means for nullifying unconcealed image data.

5. Yoshiki beneficially teaches that to cope with an image storing memory being full, the oldest *non-protected* image is deleted (i.e., nullified) from the image memory - see abstract, and [0048] - [0050], for example.

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6. It would have been obvious to one of ordinary skill in the art at to create the invention as claimed for the following reasons. It would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to modify the teachings of Mutsuaki by allowing non-protected images to be deleted, for the purpose of freeing up memory space, based upon the beneficial teachings provided by Yoshiki. These modifications would result in increased storage space and efficiency, both of which are obvious benefits to the skilled artisan. Additionally, the cited references are in the field of image storing devices and encryption, as is the current application, and thus, are in analogous arts.

**7. Claims 7, 10, 13, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mutsuaki in view of Yoshiki, and further in view of Osamu et al. (JP 05-022614).**

8. The teachings of Mutsuaki and Yoshiki are relied upon for the reasons set forth above.

9. Regarding claim 7, neither Mutsuaki nor Yoshiki teach means for detecting whether or not a processing unit for processing the image data is provided and an operation state thereof, or means for determining a concealing method based on detected results.

10. Osamu et al. beneficially teach a facsimile device including a secrecy device, wherein if the secrecy device is in a non-operating state, the components exchange data serially for compression (i.e., concealment), wherein if the secrecy device is in an operating state, the components exchange data indirectly for compression - see [0014] - [0018], for example.

11. It would have been obvious to one of ordinary skill in the art at to create the invention as claimed for the following reasons. It would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to modify the teachings of Mutsuaki and Yoshiki by allowing the device to include a means for detecting operating or non-operating modes for the concealment device and basing the concealment on the mode, for the purpose of efficiency and security, based upon the beneficial

teachings provided by Osamu et al. Additionally, the cited references are in the field of image reading devices and encryption, as is the current application, and thus, are in analogous arts.

12. Regarding claims 10, 13, and 16, Matsuaki teaches:

c. The concealing method is setting of authentication information corresponding to encrypting of the image data (A password is associated with the encrypted data) - see [0014], for example.

d. The controller further comprises:

i. Means for accepting authentication information (A password input unit) - see [0014], for example.

ii. Means for verifying the authentication information set to the image data with the accepted authentication information (A password judgment part judges whether the password is proper) - see [0014], for example.

iii. Means for permitting the output process of the image data in the case where the authentication information set to the image data matches the accepted authentication information (The image data is output if the password is proper (i.e., if the inputted password matches the correct password) - see [0014], for example.

e. The controller decodes encrypted image data in the case of performing an output operation based on the image data (A cipher image decoding part is used for restoring cipher image data) - see abstract, for example.

13. **Claims 8, 9, 11, 12, 14, 15, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mutsuaki in view of Osamu et al.**

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14. Regarding claim 8, Matsuaki teaches an image processing apparatus including a storing unit for storing image data and performing an output operation based on the image data stored in the storing unit (An image memory of a facsimile equipment is used to store image data and an image output part for outputting stored image data stored in the image memory - see abstract, for example), comprising a controller including:

f. Means for designating the image data stored in the storing unit and accepting an instruction for concealment of the designated image data (A data specifying part is used for specifying image data in the image memory and a cipher image encoding part is used for encoding (i.e., concealing) the specified data) - see abstract, for example.

g. Means for concealing the designated image data based on the accepted instruction (A cipher image encoding part is used for encoding (i.e., concealing) the specified data) - see abstract, for example.

15. Mutsuaki does not teach means for detecting whether or not a processing unit for processing the image data is provided and an operation state thereof, or means for determining a concealing method based on detected results.

16. Osamu et al. beneficially teach a facsimile device including a secrecy device, wherein if the secrecy device is in a non-operating state, the components exchange data serially for compression (i.e., concealment), wherein if the secrecy device is in an operating state, the components exchange data indirectly for compression - see [0014] - [0018], for example.

17. It would have been obvious to one of ordinary skill in the art at to create the invention as claimed for the following reasons. It would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to modify the teachings of Mutsuaki by allowing the device to include a means for detecting operating or non-operating modes for the concealment device and basing the concealment on the mode, for the purpose of efficiency and security, based upon the beneficial teachings

provided by Osamu et al. Additionally, the cited references are in the field of image reading devices and encryption, as is the current application, and thus, are in analogous arts.

18. Regarding claims 9 and 11, Matsuaki teaches that:

h. The concealing method is cipher image encoding of the image data (i.e., encrypting) - see abstract, for example.

i. The controller includes means for decoding the encrypted image data in the case of performing an output operation based on the image data (A cipher image decoding part is used for restoring cipher image data) - see abstract, for example.

19. Regarding claims 12, 14, 15, and 17, Matsuaki teaches:

j. The concealing method is setting of authentication information corresponding to encrypting of the image data (A password is associated with the encrypted data) - see [0014], for example.

k. The controller further comprises:

iv. Means for accepting authentication information (A password input unit) - see [0014], for example.

v. Means for verifying the authentication information set to the image data with the accepted authentication information (A password judgment part judges whether the password is proper) - see [0014], for example.

vi. Means for permitting the output process of the image data in the case where the authentication information set to the image data matches the accepted authentication information (The image data is output if the password is proper (i.e., if the inputted password matches the correct password) - see [0014], for example.



- I. The controller decodes encrypted image data in the case of performing an output operation based on the image data (A cipher image decoding part is used for restoring cipher image data) - see abstract, for example.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lisa Lewis whose telephone number is (571) 270-7724. The examiner can normally be reached on Monday - Friday, 6:30 a.m. - 3:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nasser Moazzami can be reached on (571) 272-4195. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Nasser Moazzami/  
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Examiner, Art Unit 2436